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| 22511 OSHA LIANG | 7590 11/21/200 I. I. P | EXAMINER | | |
| 1221 MCKINNEY STREET SUITE 2800 HOUSTON, TX 77010 | | | FERGUSON, MICHAEL P | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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| | | Application No. | Applicant(s) | |
| Office Action Summary | | 10/539,136 | THIENARD, JEAN-CLAUDE | |
| | | Examiner | Art Unit | |
| | | Michael P. Ferguson | 3679 | |
| Period f | The MAILING DATE of this communication app or Reply | pears on the cover sheet with the | correspondence address | |
| A SH WHII - Exte afte - If Ni - Faili Any | HORTENED STATUTORY PERIOD FOR REPL'CHEVER IS LONGER, FROM THE MAILING Densions of time may be available under the provisions of 37 CFR 1.1 r SIX (6) MONTHS from the mailing date of this communication of period for reply is specified above, the maximum statutory period ure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b). | PATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be solution will expire SIX (6) MONTHS from the cause the application to become ABANDON | DN. timely filed m the mailing date of this communication. NED (35 U.S.C. § 133). | |
| Status | | | | |
| 2a) | Since this application is in condition for allowa | s action is non-final. ance except for formal matters, p | | |
| | closed in accordance with the practice under I | Ex parte Quayle, 1935 C.D. 11, | 453 O.G. 213. | |
| Disposit | tion of Claims | | • | |
| 5)□ 6)⊠ 7)□ | Claim(s) <u>1-38</u> is/are pending in the application 4a) Of the above claim(s) <u>5-7,14 and 38</u> is/are Claim(s) is/are allowed. Claim(s) <u>1-4,8-13 and 15-37</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or | withdrawn from consideration. | | |
| Applicat | tion Papers | | • | |
| 10)⊠ | The specification is objected to by the Examine The drawing(s) filed on 15 June 2005 is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Example 1. | a) accepted or b) objected to drawing(s) be held in abeyance. So ction is required if the drawing(s) is constant. | see 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d). | |
| Priority- | under 35 U.S.C. § 119 | | | |
| а | Acknowledgment is made of a claim for foreign All b Some * c None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Burea See the attached detailed Office action for a list | nts have been received. Its have been received in Applica prity documents have been recei au (PCT Rule 17.2(a)). | ation No ived in this National Stage | |
| Attachme | | n □ | (770.440) | |
| 2) Not 3) Info | ice of References Cited (PTO-892) ice of Draftsperson's Patent Drawing Review (PTO-948) primation Disclosure Statement(s) (PTO/SB/08) per No(s)/Mail Date 06/15/05. | 4) Interview Summa Paper No(s)/Mail 5) Notice of Informa 6) Other: | | |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species 1, Figures 2, 2A and 7-20, claims 1-4, 8-13, and 15-37, in the reply filed on August 20, 2007 is acknowledged. The traversal is on the ground(s) that the election requirement is improper under PCT rules 13.1 and 13.2. In regards to such rules, Applicant's recites "If the independent claims avoid the prior art and satisfy the requirement of unity of invention, no problem of lack of unity arises in respect of any claims that depend upon the independent claims". MPEP 1850. This is not found persuasive because Applicant has failed to present clear evidence as to how independent claim 1 avoids the prior art. Examiner notes that such recitation holds true, only if the independent claims avoid the prior art. Furthermore, Applicant has failed to present clear evidence or arguments in regards to the lack of unity between Species 1 and 2.

As evidenced in the rejection set forth below, claim 1 fails to avoid the prior art; thus the election requirement based on lack of unity of invention within dependent claims 1-38 is proper. Species 1 pertains to a connector comprising a second tongue that elastically, deformably extends from the rear segment of the body for locking the second pin in the second recess; the second tongue comprising two side studs which pass through orifices in the cheek plates, and a finger for exerting a return force on the first horizontal top first segment of a U-shaped arm. Species 2 pertains to a connector comprising a lug carried on the locking tongue for locking the second pin in the second recess; the locking tongue comprising a control tab for releasing the second pin; and

comprising a third recess formed in a separate part mounted on and fastened to the connector by complementary locking members for receiving the end of the third category of arms. Species 1 and 2 lack the same or corresponding special technical feature. Accordingly, species 1 and 2 do not relate to a single inventive concept.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 5-7, 14 and 38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 20, 2007.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The

disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).
- 5. The following guidelines illustrate the preferred content for the specification of a utility application. These guidelines are suggested for the applicant's use.

Content of Specification

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- (a) <u>Title of the Invention</u>: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) <u>Cross-References to Related Applications</u>: See 37 CFR 1.78 and MPEP § 201.11.
- (c) <u>Statement Regarding Federally Sponsored Research and Development:</u> See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc:
 The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) <u>Background of the Invention</u>: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) <u>Brief Summary of the Invention</u>: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The

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summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

- (h) <u>Brief Description of the Several Views of the Drawing(s)</u>: See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual

- Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (I) Sequence Listing, See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Claim Objections

- 6. Claims 8-13 and 15-37 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 8-13 and 15-37 have not been further treated on the merits.
- 7. Claims 1-4 are objected to because of the following informalities:

Claim 1 (lines 4-5) recites "the connector being of the type having". It should recite --the connector comprising--.

Claim 1 (lines 8-25) recites "the connector being of the type: -that is suitable for being received at least in part against the inside end wall of the end (34) of an arm (32a) that belongs to a first category of arm, which end is in the form of a U-shaped hook, via an outside convex cylindrical face portion (74a) of the body (68) and via shapes in relief (79) provided on the facing inside vertical longitudinal faces (66i) of the side cheek plates (66), so that... -that is suitable for receiving a second transverse pin (62) that belongs to a second category of arm (32b) and that extends transversely from a side edge (34a) of the end (34) of the arm (32b) in a second cylindrical recess (84) of the body (68) into which". It should recite --the connector comprising: an outside convex cylindrical face portion (74a) of the body (68) and shapes in relief (79) provided on the

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facing inside vertical longitudinal faces (66i) of the side cheek plates (66), for receiving at least in part against the inside end wall of the end (34) of an arm (32a) that belongs to a first category of arm, which end is in the form of a U-shaped hook, so that... a second cylindrical recess (84) of the body (68), for receiving a second transverse pin (62) that belongs to a second category of arm (32b) and that extends transversely from a side edge (34a) of the end (34) of the arm (32b), into which--.

Claim 1 (line 34) recites "the position". It should recite --a position--.

Claim 1 (lines 36-37) recites "the second longitudinal end". It should recite --a second longitudinal end--.

Claim 2 (lines 1-2) recites "to any preceding claim". It should recite --to claim 1--.

Claim 2 (line 4) recites "the front outside". It should recite --a front outside--.

Claim 2 (line 6) recites "of the arm". It should recite --of the first category arm--.

Claim 2 (lines 8-9) recites "and whose horizontal top face (76s) defines". It should recite -- and comprises a horizontal top face (76s) defining--.

Claim 2 (lines 10-11) recites "and whose bottom face (76i) is provided". It should recite --and comprises a bottom face (76i) provided--.

Claim 2 (line 13) recites "the top face". It should recite --a top face--.

Claim 3 (lines 1-2) recites "to any preceding claim". It should recite --to claims 1 or 2--.

Claim 3 (lines 4-5) recites "the cylindrical wall of a second". It should recite --a cylindrical wall of the second--.

Claim 3 (lines 6-7) recites "the position". It should recite -- a position--.

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Claim 4 (lines 1-2) recites "to the preceding claim". It should recite --to claim 3--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

Claim Rejections - 35 USC § 112

- 8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 9. Claims 1-4, 8-13 and 15-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 (lines 4-5) recites "the connector being of the type having". Claim 1 (lines 8-25) recites "the connector being of the type: -that is suitable for being received at least in part against the inside end wall of the end (34) of an arm (32a) that belongs to a first category of arm, which end is in the form of a U-shaped hook, via an outside convex cylindrical face portion (74a) of the body (68) and via shapes in relief (79) provided on the facing inside vertical longitudinal faces (66i) of the side cheek plates (66), so that... -that is suitable for receiving a second transverse pin (62) that belongs to a second category of arm (32b) and that extends transversely from a side edge (34a) of the end (34) of the arm (32b) in a second cylindrical recess (84) of the body (68) into which". The phrase "of the type" renders the claim indefinite because the claim include elements not actually disclosed (those encompassed by "of the type"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). The phrase "of the type" fails to clearly define the metes and bounds of the invention as it is

unclear what elements are "of the type" and what elements are not. Accordingly, it is unclear as to which limitations following such phrase are positively claimed within claim 1. Claim 1 (lines 8-25) should recite --the connector comprising: an outside convex cylindrical face portion (74a) of the body (68) and shapes in relief (79) provided on the facing inside vertical longitudinal faces (66i) of the side cheek plates (66), for receiving at least in part against the inside end wall of the end (34) of an arm (32a) that belongs to a first category of arm, which end is in the form of a U-shaped hook, so that... a second cylindrical recess (84) of the body (68), for receiving a second transverse pin (62) that belongs to a second category of arm (32b) and that extends transversely from a side edge (34a) of the end (34) of the arm (32b), into which--.

Claims 2-4, 8-13 and 15-37 depend from claim 1 and are likewise rejected.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 11. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Robert Bosch (WO 01/15946).

As to claim 1, Robert Bosch discloses a connector 10 for connecting one end of a windshield wiper arm 11a,11b,11c to a first transverse hinge pin 18 belonging to a structure element of a wiper blade unit 12, the connector comprising two parallel vertical

side cheek plates **30** that are interconnected by a body **27** defining a first recess **38** into which the first hinge pin can be inserted radially, the connector being:

an outside convex cylindrical face portion of the body and shapes in relief

27a,27b,27c,45 provided on the facing inside vertical longitudinal faces of the side

cheek plates, for receiving at least in part against the inside end wall of the end of an

arm 11a that belongs to a first category of arm, which end is in the form of a U-shaped

hook 11a, so that the connector is capable of being received against the inside end

walls of ends of arms belonging to the first category of arm and of different sizes; and

a second cylindrical recess 43 of the body, for receiving a second transverse pin 24 that belongs to a second category of arm 11b and that extends transversely from a side edge of the end of the arm, into which recess the second pin can be inserted transversely, which recess is defined in part by a locking tongue 45 that is elastically deformable and that extends substantially longitudinally, a first longitudinal end of which tongue is fastened to the body, the locking tongue being suitable for retracting and for enabling the second pin to be inserted, and for causing the second pin to be locked transversely in a position in which it is mounted in the second recess;

the connector being characterized in that a second longitudinal end of the locking tongue is normally connected to the body **27a** by a film of material **48**, and in that the dimensions of the film are determined so that the second recess is capable of receiving a second pin that can be of a first or of a second size, the second size being greater than the first size, and inserting a second pin of the second size causes the film of material to break (Figures 1-9).

As to claim 2, Robert Bosch discloses a connector 10 characterized in that the body 27 includes a front segment that defines the first recess 38, a front outside wall 36 of the front segment being suitable for being received against the inside end wall of the U-shaped hook of the first category arm 11a, and a rear segment 27a that extends horizontally above the locking tongue 45, and comprises a horizontal top face defining a bearing face for bearing against a top branch of the U-shaped hook 11a, and comprises a bottom face provided with a concave portion that defines in part the second recess 43, in association with a facing concave portion of a top face of the locking tongue (Figures 4-8).

As to claim 3, Robert Bosh discloses a connector 10 characterized in that the connector includes a locking element (constituted by sidewalls of tongue 45) that is suitable for being received in an annular groove formed in a cylindrical wall of the second pin 24 of the first size or of the second size for locking the second pin transversely in a position in which it is mounted in the second recess 43 (Figures 3 and 4).

As to claim 4, Robert Bosch discloses a connector **10** characterized in that the locking tongue **45** exerts a resilient locking force on the second pin **24** so as to prevent the locking element (constituted by sidewalls of tongue **45**) from disengaging from the annular groove (Figures 3 and 4).

Conclusion

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to windshield wiper connectors:

Kim (US 2002/0174505), Lee (US 5,611,103), Witek et al. (US 5,885,023), Rosenstein et al. (US 6,640,380) and Cooper Industries (EP 0 863 058) are cited for pertaining to connectors comprising a body having shapes in relief and locking tongue for receiving multiple categories of wiper arms.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (6:30am-3:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MPF

11/14/07

Michael P. Ferguson
Patent Examiner

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